

C-Pond Post Closure Plan
Written Post Closure Plan under
40 CFR 257.104(d)



Greenidge Generation LLC
Dresden, New York

November 2020

Prepared by



REPORT

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Dresden, New York

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Prepared by
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1. Introduction

This Post-Closure Plan was prepared for Greenidge Generation LLC's C-Pond in accordance with 40 CFR 257.104(d). The C-Pond is an existing "CCR surface impoundment" as defined in 40 CFR 257.53.

1.1 Background

The Greenidge Power Generating Station (Greenidge) is an electrical generating plant in the Town of Torrey, Yates County, New York and is owned by Greenidge Generation LLC. Greenidge was idle and in a protective layup status between the spring of 2011 and March 2017. The Station formerly burned coal and resumed electric generating operations in 2017 after being retrofitted to burn natural gas with the ability to co-fire up to 19% wood biomass. Prior to layup, C-Pond received bottom ash from a sluice system. Currently, C-Pond treats a mixture non-CCR waste streams including plant process waters and stormwater primarily through sedimentation and infiltration.

The current footprint of C-Pond is approximately 7.24 acres. The area consists of a sinuous channel which discharges the overflow from C-Pond to Seneca Lake. A State Pollutant Discharge Elimination System (SPDES) permit (No. NY0001325) is maintained to discharge the overflow. The planned closure approach for C-Pond will leave the CCR in place. The C-Pond area CCR shall be regraded and consolidated to achieve positive drainage, with an overlying Final Cover System, and a new lined Pond installed for the continued management of stormwater and non-CCR waste streams. The closure approach is described in more detail in the C-Pond Closure Plan (Ensol, November 2020).

2. Post-Closure Plan Content

As required by 40 CFR 257.104, the owners and operators of existing coal combustion residuals (CCR) surface impoundments must prepare a post-closure plan (the Plan or post-closure plan). The plan must describe the necessary steps to care for the CCR unit post-closure as defined in 40 CFR 257.104(b). The written post-closure plan for the CCR unit must be consistent with the applicable requirements of 40 CFR 257.104(d)(1)(i) through (iii).

The following minimum information is required for the Plan:

- Final cover system inspection, maintenance, and repair frequency.
- Groundwater monitoring system operation and inspection, maintenance and repair frequency.
- Post Closure Facility contact information.
- A description of the planned use(s) of the property during the post-closure care period.

2.1 Post-Closure Plan Revisions

If there is a change in conditions or operation that affects any of the elements in the current document, the plan will require revision in accordance with 40 CCR 257.104(d)(3). Revised plans are not in effect until they are certified by a qualified professional engineer and placed in the operating record, and the revision must occur at least 60 days prior to any change in the operation of the facility or unit. In the event of an unanticipated occurrence requiring a change in the Plan, the revision must be completed no later than 60 days after the triggering occurrence. If post-closure has commenced and the plan requires revision, the revision must occur no later than 30 days after the triggering event.

2.2 Facility Contact Information

The Facility contact for the Greenidge Generation Station Site is listed below:

Name: Dale Irwin

Phone: (315) 719-8336

Address: 590 Plant Road Dresden, New York

2.3 Post-Closure End Use Plan

The intended end-use of the closed C-Pond will be a sloping meadow and a new lined Pond for the continued management of stormwater and non-CCR waste streams. No activities, beyond maintenance and repair of the final cover system, the new Pond liner, and the groundwater monitoring system are planned at this time. No future activity or use that may potentially damage the integrity of the final cover system will be permitted without first assessing any potential impact, designing necessary steps to address any impacts and revising this Plan, as necessary. The intended end use will not interfere with post-closure or custodial care monitoring and maintenance of the Facility. Public access to the Facility will not be permitted and as such will not result in damage to the final cover system or adverse impacts to public health of the environment. Any revision of this Plan resulting from a change in the use of the property during the post-closure care period must be certified by a professional engineer and entered into the operating record in accordance with 257.104(d)(3).

3. Maintenance and Inspection

3.1 General Maintenance

Vegetative cover shall be established on all areas with final cover within four months of final cover placement and shall be maintained by annual mowing. If vegetative cover cannot be established in this timeframe measures will be taken to protect the exposed final cover areas from damage and erosion (e.g., erosion and sediment controls). Any damage to the final cover system during this time will be repaired when conditions permit. Mowing activity will be scheduled for late summer, between August 16th and October 1st. This timing for mowing is preferred per the New York State Department of Environmental Conservation's best management practices for the protection of ground-nesting species to nest and raise their young in an undisturbed manner. The late summer timing also will allow grasses and forbs to form seeds to generate the next season's plants, which are an important food item for native and migratory birds and small mammals. Any undesirable plant species (i.e., woody plant growth) will be subject to more extensive removal techniques if their presence is suspected to have the potential to deteriorate the integrity of the final cover.

All access roads shall be maintained to allow personnel access to the site for other maintenance, monitoring, and inspection activities. Fencing and gates shall be maintained to secure the Facility and ensure that it is not accessible to the public. Maintenance and repair activities will be conducted as necessary and may include minor soil erosion repairs and more detailed repair should an unexpected issue be revealed during one of the routine inspections. Such unexpected issues include possible settlement, subsidence, major erosion, small mammal burrows, or any other events. In accordance with 257.104(c), Greenidge will conduct post-closure care for 30 years.

3.2 Inspection

Facility inspections will occur at a minimum on a quarterly basis during the post-closure care period. The Final cover, stormwater management system, perimeter fencing, site access roads, and groundwater monitoring well integrity will be inspected and documented. More frequent inspections will occur whenever there is a seismic event that may affect the integrity of the final cover or other Facility systems and after each five-year, 24-hour storm event. The following shall be observed during the inspections:

- Final cover condition for the presence of cover soil sloughing, erosion rills/gullies, animal burrows or dens, leachate breakouts, and any surface water ponding on the cover soil.
- Stormwater collection system for signs of erosion, and obstruction of flow in run-on and run-off stormwater collection channels.
- The new Pond for signs of sediment build-up and any obstruction at the inlet and the outlet.
- Groundwater monitoring wells for evidence of damage to the casing or well seal, and indications of surface water ponding.

Maintenance and repair activities will be conducted as necessary based on any issues revealed during routine inspections.

4. Groundwater Monitoring

As required by 40 CFR 257.90, a groundwater monitoring system shall be installed for C-Pond. The groundwater monitoring data shall be evaluated in accordance with 40 CFR 257.93 and 257.94. In accordance with 40 CFR 257.93, the groundwater monitoring system shall consist of a minimum of one upgradient and three downgradient wells which will yield groundwater samples from the uppermost aquifer.

Groundwater will be sampled quarterly during the post-closure period for site-specific parameters set forth in the facility's Groundwater Monitoring Plan. The Groundwater Monitoring Plan shall be in accordance with 40 CFR 257.93 and 257.94 as well as the applicable New York State Department of Environmental Conservation requirements, to the extent the State are more stringent. Samples will be collected, preserved, and analyzed according to the methodologies outlined in the Groundwater Monitoring Plan.

An annual groundwater monitoring and corrective action report shall be prepared to document the status of the groundwater monitoring and corrective action program for C-Pond in accordance with 40 CFR 257.90(e). At a minimum, the C-Pond annual groundwater monitoring and corrective action report will contain the following information:

- A map showing C-Pond and all upgradient and downgradient monitoring wells;
- Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;
- In addition to all the monitoring data obtained, a summary including the number of groundwater samples that were collected for analysis for each upgradient and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;
- A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and
- Other information required to be included in the annual report per 40 CFR 257.90 through 257.98.

5. Engineer's Certification

I hereby certify that the Written Post Closure Care Plan for the Greenidge CCR surface impoundment owned and operated by Greenidge Generation LLC meets the requirements of 257.104(d) of the Federal Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities; Final Rule (40 CFR 257; the CCR Rule).

As used herein, the word "certification" and/or "certify" shall mean an expression of the Engineer's professional opinion to the best of his or her information, knowledge, and belief, and does not constitute a warranty or guarantee by the Engineer.

I am a duly licensed professional engineer in the State of New York.


David A. Lenox, P.E.
NYSPE LIC # 093384



11/20/2020